Autumn 2021

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Regionalization, or regional collaboration, can be difficult. The conversations around these issues can be challenging, and the work is time consuming and often starts with small victories that are not always obvious. RCAP works to facilitate these difficult conversations. By acting as a third-party, objective voice, RCAP helps communities understand both the issues and opportunities that might arise as they start considering regionalization approaches. Often, communities are already doing this in small ways, without even knowing it. That is why the language around these issues are so important, to ensure that we can get a common understanding of what regional collaboration might look like, and to ensure that transparency and communication are at the forefront. When adopted, regionalization can have significant benefits for communities. RCAP is happy to facilitate these developments in communities.

With approximately 150,000 public water systems across the country, the need to think regionally continues to be of critical importance. Small systems sometimes struggle with the need to provide safe drinking water at an affordable price. Some areas are starting to think about how they might work with neighboring systems to drive economies of scale and reduce costs, all while improving performance. Over the past year, RCAP has built on the long-standing work around water and wastewater regionalization to expand the work on the ground and raise important issues around policy and lessons learned for the field. In the past year, more than 75 regionalization projects have been worked on through RCAP’s six regional partners, and two research projects have been published. This mix of data and on-the-ground work has further elevated RCAP’s role in regionalization and helped to introduce new conversations with partners interested to learn more about this approach.

RCAP’s 10 Lessons Learned from Rural Water and Wastewater Partnerships research does just that, helping communities understand what regionalization is and providing lessons learned from others that have taken a regional approach. RCAP’s Recommendations for Water and Wastewater Policy research helps to further refine policy approaches at the local, state, and federal level that can provide opportunities for more regionalization to occur. Both research projects are meant to provide data, resources and recommendations that will help facilitate more water and wastewater regionalization across the country.

We are at a unique moment in the water industry, where federal resources may become available to accelerate positive change for systems of all sizes. It is imperative that we think regionally, drive solutions locally, and ensure that everyone has access to affordable, safe drinking water and sanitary wastewater. Regionalization is just one piece of that puzzle but is critical to ensure that we achieve that goal. In this month’s issue of Rural Matters, you will read much more about the work happening across the country on regional collaboration and see just how impactful this work can be.

Nathan Ohle
RCAP CEO
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Across the United States, different states have opted to take differing approaches to funding the development of the next generation of water and wastewater infrastructure. One of the many decisions states have been forced to make when looking into potential changes to their funding mechanisms has been how to handle regionalization. Some opt to incentivize it, some opt to mandate it. Others choose to take a more hands-off approach and do neither.

In this article, we look at a new funding mechanism in the state of Illinois and explore the ways it is working to incentivize the development of regional wastewater projects.

A New and Necessary Grant Program

Last fall, the Illinois Environmental Protection Agency (IEPA) announced the Unsewered Communities Grant Program (https://www2.illinois.gov/epa/topics/grants-loans/unsewered-communities/Pages/default.aspx). The IEPA states that it is “aware of over 200 Illinois communities that have inadequate or nonexistent wastewater collection and treatment facilities. Some communities rely on individual septic tank systems which often provide inadequate treatment leading to illegal surface discharges. Where wastewater ‘collection’ facilities are present, these facilities are often patchworks of decades-old underground ‘wildcat’ systems that result in illegal surface discharges.”

To combat this problem, IEPA pledged to put more than $100 million into this program over the next several years. The program gives two types of grants:

- Planning grants – IEPA is allocating $1 million per year for four years that communities can use for pre-construction development purposes. The maximum grant amount is $30,000 and there is no match required. IEPA is using a score-based approach to grade the applications, looking at several factors including

A Collaborative Approach to Unsewered Communities

Zach Green, Senior Rural Development Specialist, Great Lake Community Action Partnership Illinois
population, median household income, and a regional-based approach.

- Construction grants – IEPA is also allocating $20 million per year for five years for the construction of new systems. The maximum award per community is $5 million. Like the planning grants, no match is required. Applications for construction funds are graded on a competitive basis.

Many of the unsewered communities in Illinois are small, disadvantaged and cannot afford to invest the necessary capital required for the pre-development planning needed to even start down the path of becoming a sewered community. This was the major driving force behind the formation of the program. As in many other states, State Revolving Funds (SRF) in Illinois can be used for pre-development activities but are not reimbursable until after the fact. Through the new planning grants, rural communities can overcome this barrier to entry by developing a project plan with practical and affordable solutions to their wastewater collection and treatment problems. Once the plan is complete, communities are able to apply for the construction grant to build the newly identified collection and/or treatment facilities.

Under its current framework, the Unsewered Communities Grant Program will incentivize communities to consider regional approaches to their wastewater needs using a two-pronged approach. First, on the front end, both grant categories give extra points that incentivize communities to put forth an application with regional approaches in mind. Second, through the actual planning process, IEPA is requiring communities to provide an analysis of various alternatives to identify the most cost-effective long-term solution. It will be tough for communities to provide "an analysis of various alternatives" without considering regional-based approaches.

In 2020-2021, IEPA moved through the first program cycle for planning grants. In May 2021, IEPA’s director, John Kim, announced the first $1 million in funding awards. In the announcement, Governor Pritzker said the program “will provide disadvantaged communities across Illinois with the needed funds to improve sewer systems and reduce impacts in the environment. These investments are only one piece of the capital plan and we will continue working to improve the financial wellbeing, health, education and safety of all Illinois residents.”

**From the Field: The Vision Is Realized**

RCAP staff had the distinct pleasure of assisting several rural communities throughout Illinois with applications for this new program, and we are excited to share the following example.

Shortly after the program was officially announced, Pendleton Township in Jefferson County reached out to local RCAP staff to request assistance with the lack of wastewater infrastructure in parts of their township. The township is made up of a large rural area along Interstate 64 and consists of two communities, Opdyke and Belle Rive. Opdyke is a census designated place in Jefferson County but also happens to be unincorporated. Belle Rive is Opdyke’s municipal neighbor just a couple miles southeast. Both communities are extremely rural with very small populations of around 300 each. Because of their location, both communities share many common qualities with rural communities across the region, like high levels of agricultural industry, an aging population, population loss, and high numbers of low- to moderate-income individuals.
A municipal wastewater system was put into Belle Rive in the late 1980s and early 1990s. At the time, for various reasons from cost to political issues, there wasn’t enough support to have the new system extended to Opdyke. In the decades since the completion of that project, officials from the township who live in Opdyke have held hopes of one day having a system—and they have continued to explore the possibility. Several years ago, the local regional planning district was brought in to explore the possibility of extending service. However, it quickly became apparent to everyone involved that such a project was going to be cost prohibitive, as they would struggle to raise enough capital for the pre-construction planning.

IEPA’s Unsewered Communities Program was specifically designed to assist communities in situations like this. The announcement of the program gave this project the “shot in the arm” it needed to get things moving in a positive direction. After several project development meetings in 2020, it became clear that there was one key hurdle to overcome: eligibility. Opdyke is an unincorporated community, so on their own there was no clear path for them to submit an application. They needed a partner and were up against an extremely tight timeline to submit an application. Knowing that they would eventually need all the help they could get in terms of construction funds, the group wanted to take a planning approach that would put this project in the best possible position for access to the construction program funds down the road—if everything were to go right.

Belle Rive quickly became the obvious answer to this problem for several reasons:

1. Location – The two communities are a straight shot down a main highway from each other.
2. Experience – At this point, Belle Rive has been operating a system for decades.
3. History – Belle Rive was open to doing this when they originally put their system in about 30 years ago.
4. Familiar faces – Both communities are in the township.
5. No match requirement – This was a huge incentive to bring everyone into the fold. With RCAP’s technical assistance, the barrier to entry essentially became zero dollars for the first time ever.
6. Regional approach – This made for a stronger application.

Belle Rive was very open to working with the project team to forge ahead in the process. As Belle Rive’s mayor, Kim McCormick, explained during a recent meeting, “We’re thrilled to have this opportunity to provide support to a neighboring community. Through this grant, it’s our goal to explore the possibility of bringing a municipal wastewater system to the residents of Opdyke.” Using Belle Rive as the main applicant, they got approved for $27,500 in planning funds. They are currently in the process of contracting out the planning work and look forward to having a completed analysis in the near future.

A Bright Future
The situation in Belle Rive, Opdyke and Pendleton Township highlights an example of regional collaboration serving as a potential tool for positive change and the creation of win-win scenarios. This needed project would likely have remained stagnant, as it has over the past few decades, if it wasn’t for this creative funding opportunity from IEPA and the State of Illinois. Thanks this program, regional collaboration will likely continue to increase in the wastewater space over the next few years. 📚
Some of the most beneficial practices in regional collaboration occur at an informal level. This is true for many water systems across the nation. In fact, many small systems may already be practicing regional collaboration, though they may be unaware they are doing it.

In March 2020, RCAP Solutions hosted a Pennsylvania Regionalization Summit. One of the attendees was Daryl Shafer, Haines Township Supervisor. About a year later, Mr. Shafer contacted RCAP Solutions and requested a regional meeting that RCAP staff would facilitate. He wanted to capitalize on what he had learned at the summit and put it into action.

The driving force behind this effort stemmed from Mr. Shafer’s desire to seek solutions in his community and neighboring communities. The meeting would be primarily for small water systems in a geographical area in Centre County to discuss regional opportunities. Mr. Shafer recognized the need for collaborative measures for many of the systems to build their technical, managerial and financial (TMF) capacity.

Identifying the Challenge
The water systems invited to the meeting are all located in the Penns Valley area of Centre County and they have many of the same challenges. This is a rural area located in the heart of Pennsylvania, surrounded by thousands of acres of fertile agricultural land. Small communities dot the landscape as you drive through the valley.

A benefit to the cropland in this area is the limestone geology; however, over the years, the limestone geology became bad news for the small water systems. Because of the karst limestone, many of the systems were served by springs that are abundant in this setting. With the passing of the surface water filtration rule in the 1990s, many systems were required to install filtration or locate an acceptable groundwater well, since their springs were identified to be under the direct influence of surface water.

The infrastructure upgrades challenged the systems for many years to come. They had difficulty affording the upgrades due to the small customer base served by each system. Building and upgrading a sustainable system in the valley during this time was especially difficult. Since then,
it has been challenging to find and retain appropriately certified operators for the filter plants.

This predicament is not uncommon, but finding so many systems in this situation within several miles of each other is certainly unique. And the legacy of the issues that began 20 to 30 years ago continues today. While the systems are meeting the requirements of the surface water filtration rule now, the residual effects of completing such a heavy and expensive task remain.

In recognizing the shared challenges of staffing shortages, failing infrastructure, rising costs and maintaining compliance, Daryl Shafer saw an opportunity to mitigate the challenges by looking to regional collaboration for solutions.

Clarifying the Intent
The township supervisor and RCAP held a planning session to determine the primary topics and agenda for the meeting they wanted to hold. The overall goal of the meeting was to bring the water systems together, have a group discussion on the challenges each system faces, and discuss opportunities where they could cooperate to overcome some of those challenges.

Since the systems were already familiar with the township supervisor, the planners decided that he would send out the invites. Still, some of the invites were met with hesitation, as regional collaboration can be perceived as only consolidation or mergers. While regionalization can include consolidation, this meeting did not pertain to any type of consolidation; it was intended only to discuss informal cooperation. The concern was addressed through a follow-up email that clarified the intent of the meeting.

Holding the Meeting
On July 27, 2021, seven different water systems met in the evening at a centrally located place to discuss regional collaboration. Twenty-two people representing the systems and several people from the county planning commission were in attendance. The meeting started with a catered meal where attendees met each other and had informal discussions regarding their systems.

RCAP kicked off the meeting by covering some important sampling and monitoring reminders for the systems and then discussed some key changes in the upcoming revised lead and copper rule scheduled to be finalized by the end of the year. Shortly after these regulatory reminders, the conversation changed to regional collaboration. RCAP covered the basics of regional collaboration by sharing the definition, benefits, and challenges; they also presented a few case studies to highlight the benefits of collaboration. Each system then took a few minutes to discuss their system and what they perceive as their greatest challenge and their greatest strength. This was a great lead-in to the group discussion that followed.

The group discussion was the core of the meeting. This is when solutions are found. It is an interesting dynamic when systems begin to have an open discussion among each other so that ideas and problem-solving organically come into the open. In the discussion, it became known that one system was paying 50% more for their sodium hypochlorite than several other systems were, just by using a different supplier. This would not have been easily known if it were not for the meeting. Another system was using a contracted third party for all their leak detection work, which cost them a considerable amount of money. During the discussion, one of the larger neighboring systems offered to assist them with leak detection at a much lower rate than the contracted party. The cooperation between these two systems has the potential to save significant sums of money. This type of relationship with neighboring systems is very valuable, especially to small rural systems, where every dollar counts.

One challenge discussed was the capacity to retain a certified operator for each system. This challenge was met by the willingness of the certified operators in the group to offer their services to the systems in need. It was remarkable to facilitate such a valuable discussion between the systems. As the facilitator of the meeting, RCAP compiled a list of all attendees with contact information for each system. In a follow-up email to all systems, RCAP included the contact list to encourage continued communication with each another.

Following Up
The type of dialog that occurred during the meeting helps to break down the barriers between systems and eases the collaborative process for those involved. Our hope is that the discussions and meetings continue, whether with a set schedule or periodically. The meetings are valuable in the effort to build capacity at the local level. We couldn’t have said it better than Mr. Shafer when he was asked his thoughts on the meeting. He stated, “I know volunteer water board members and water system employees don’t need another meeting to attend, but my hope is that this meeting planted the seeds of cooperation between systems. I believe that once the attendees realized that they all spoke the same technical language, it got the discussion rolling. Now, with a little shepherding, I believe the relationships developed will prove to be beneficial and profitable.”

If you run a water or wastewater system, RCAP encourages you to take small steps in regional collaboration to enhance the overall capacity of your system. From this example, you can see how small steps for these rural communities can lead to big leaps in building capacity.
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Over the past few decades, we’ve seen more and more extreme weather events sweep the nation: floods in the Carolinas, droughts in the West, hurricanes along the Atlantic coast, the winter storm that battered Texas and, most recently, tornadoes across the South. These events have people talking about many things, but one topic that doesn’t get as much attention as it should is water—or more to the point, water infrastructure.

When weather goes to extremes, it can have a variety of effects on water utility operations, each requiring different solutions. Intense rainfall, for example, can overload storm and sewer systems and cause pollutants to enter the waterways. Thus, greater flood protection and larger dam spillways might be necessary to protect water quality. On the other hand, extreme storms cause widespread blackouts, shutting down water pumps and treatment facilities. Even if the system has redundant electricity, there’s no telling how many lines could go down. Emergency standby generators and alternative fuel options could help keep the systems online.

With smaller systems, however, the response can be drastically different. Largely due to budgetary constraints, certain measures never come to fruition. Instead, you’ll see neighboring communities helping each other out during a state of emergency. Commonly, one system might borrow a generator from another. For example, in talking with a local water association in Georgia, I learned of its efforts in helping not just nearby communities, but also those that are one or two states away. This association has sent crews to Alabama, Florida and elsewhere. Systems truly rely on one another to get everything up and running after a storm.

Finding Sustainable Solutions

Although the recent winter storm in Texas was out of the ordinary, it shines a light on the need for emergency preparedness and proactive infrastructure investments to improve long-term resilience. When the power eventually came back on, around half of Texas residents were still dealing with issues due to water infrastructure—and those who did have water were being told to boil it prior to consumption.

Although Texas enacted plans to connect working facilities, these facilities were already overloaded due to outages, burst lines, and other issues. More than 1,180 public water systems in 160 counties experienced disruptions, affecting nearly 15 million people. This should only serve to reinforce the need for state and local leaders across the nation to prioritize water-related adaptation to ensure nothing at this level happens in other areas.
The question is this: How can a smaller water system prepare for an extreme weather event or other natural disaster? The answer often comes down to three separate, yet related strategies.

1. Long-term disaster scenario planning
Managing risk during extreme weather events can be a challenge for water systems, due to the level of uncertainty involved. Although there will always be elements out of your control, disaster scenario planning can help uncover what is, in fact, entirely within your control. It also highlights any existing processes and procedures in need of improvement.

But it isn’t enough to simply develop a disaster scenario plan. You must review it with some regularity (once a year at a bare minimum, but also when you add a new board or council member, manager or operator). It’s also wise to review this plan when updating the system. The goal here is that everyone understands the overarching framework of any given scenario, should the unexpected happen.

As with any plan, yours will depend on a number of factors, including the city, region and system. Fortunately, the Environmental Protection Agency (EPA) provides a template to get you started in developing a long-term disaster plan. EPA now requires water systems serving 3,300 or more in population to develop and regularly update and certify a risk and resiliency assessment and an emergency response plan (ERP). The EPA template is compliant with the agency’s new ERP requirements.

2. Regionalization contingencies
Oftentimes, bigger systems will have more money, advanced technologies, experienced teams and an even quicker Federal Emergency Management Agency (FEMA) response. And though smaller systems generally don’t like the idea of “so and so” taking over, partnerships or just banding together with other systems can provide access to much-needed personnel, equipment, materials and associated services to restore operations during an emergency.

As you develop and formalize a disaster scenario plan, consider solidifying relationships with neighboring systems. Make those relationships part of the disaster plan and discuss how each system can support one another in any given scenario. This move could lead to increased cooperation in other areas, or even to regionalization later down the line.

You might also want to explore the option of joining a mutual aid and assistance network. As with coordinating services with neighboring systems, this can help establish a proactive response, with utilities agreeing to help and share resources in case of emergency or disaster. Again, the EPA can provide more information on any existing Water and Wastewater Agency Response Networks in your area. The mutual aid agreements included in these partnerships can formalize relationships in a way that allows for easier reimbursement from FEMA and others.

3. Increased power resilience
Although this goes without saying, power is critical for both water and sewer—so it’s critical to establish good relationships with electric utilities. Work with power providers to make sure you can get things back online quickly. Include their management teams in at least some of your discussions concerning the disaster scenario plan. Doing so can help ensure your system is part of the power restoration protocols.

Part of these discussions should also include the minimum power requirements to return the system to its essential functions, as well as any backup power and fuel requirements if the system goes offline. Share any and all relevant information about the system with the electric power provider, and ask about the order in which power will be restored to local infrastructure throughout the area.

Depending on the nature of the emergency and local procedures, you might need to work with an emergency management agency (EMA) to ensure continuity of operations. For information on the function of the EMA, please refer to EPA’s “Connecting Water Utilities and Emergency Management Agencies” guidelines.

Conclusion
If the last few years have taught us anything, it’s that extreme weather isn’t going anywhere. Systems of all sizes need to review their water infrastructure, identify any components in need of improvement, and develop a strong emergency preparedness framework. Sometimes, the best response is simply careful planning—even when the circumstances are unknown.

Julia McCusker
Regional Vice President of Water at CoBank, a national cooperative bank serving vital industries across rural America. CoBank is one of the largest private providers of credit to the rural economy. The bank provides loans, leases, export financing and other financial services to agribusinesses and rural power, water and communications providers in all 50 states. Over the years, RCAP has been a key delivery agency for CoBank in providing technical assistance for many of the country’s smallest rural utilities.
When forming a regional collaboration between local water or wastewater systems, one of the first steps is to gather stakeholders. These are the parties who are involved in and affected by the collaboration. In this article, we look at how Everglades City, Florida is using stakeholder meetings to help create a new regional wastewater system. Read on to find out about the system’s background, who the stakeholders are, and the meeting strategies.

Background
Everglades City is located in Collier County in southwest Florida. The city’s economy largely depends on tourism and the natural environment, as the city is close to several natural parks and protected areas. These include the Big Cypress National Preserve, Everglades National Park, Ten Thousand Island National Wildlife Refuge and Collier Seminole State Park. Everglades National Park’s Gulf Coast Visitors Center is also located in Everglades City. In addition to tourism, the city has strong commercial fishing and stone crabbing industries.

Despite hosting thousands of visitors annually, the city has a full-time population and tax base of fewer than 500 residents. The city’s wastewater needs are served by the Everglades City wastewater system; the service area includes residential and commercial customers both within and outside the city limits. The service area includes the unincorporated communities of Chokoloskee, Plantation Island, Carnestown, Copeland, and Big Cypress. The entire system serves approximately 1,000 customers. The area also includes significant portions
where people use septic tanks that are currently affecting the vulnerable ecosystem and thus the tourism economy.

The city’s wastewater facility is considered to be in “fair” to “very poor” condition, which led the Florida Department of Environmental Protection (FDEP) to issue a consent order requiring Everglades City to completely replace it by July 24, 2023. The estimated cost for the replacement is $21 million. In addition, the Big Cypress National Preserve is served by a private wastewater treatment facility that is also under final consent judgment to be replaced; they would like to be tied into the new Everglades City wastewater system. A new system would also remove the hundreds of septic tanks, reducing pollutants. With a new facility and additional connections, the new system will have an estimated 1,200 customers.

Stakeholder Meetings
To help pay for construction of the new wastewater treatment facility and demolition of the current facilities, Everglades City’s representative in the State House made an appropriations funding request for $4.3 million. When this funding was secured, the city began planning for stakeholder meetings.

Now that the city has obtained state funding, the local stakeholders have more confidence in the success and financial feasibility of the project. The first stakeholder meeting was organized in the summer of 2019.

A stakeholder list, especially for regional collaboration projects, is large and diverse. Stakeholders can come from many different categories, including governments, funders, local interest groups and others. Those listed below are engaged in the Everglades City Regional Wastewater Project.

Governments
- The City of Everglades – The largest water and wastewater service provider in the area, the owner of the plant that will be replaced, and the project coordinator.
- Collier County – Home to the unincorporated communities. Some county residences are customers of Everglades City’s wastewater system, while others are on septic tanks. The County also owns all the roads in the unincorporated areas as well as a major road through the City that runs above utility pipes.
- City of Marco – The closest nearby municipality.

Natural Parks
- Everglades National Park – Located next to Everglades City. Its Gulf Coast Visitor Center is a system customer.
- Big Cypress National Preserve – Adjacent to the city. Owner of a private wastewater treatment facility that is also under final consent judgement to be replaced. They plan to connect to Everglade City’s new wastewater system.

Public Services
- Greater Naples Fire District – System customer.
- Collier County Sheriff’s Office – System customer.

Operators
- U.S. Water – Operator of Everglades City’s water and wastewater plants. Also the owner and operator of the
water system in the Town of Copeland, which the city is in preliminary talks to acquire.

Engineers
- CPH, Inc. – The engineering firm chosen for the project to replace the wastewater treatment plant.

Regulators
- South Florida Water Management District
- Florida Department of Environmental Protection (DEP) – Party to consent final judgements for Everglades City and Big Cypress National Preserve. Grant manager for state appropriation funds. Also, DEP’s Fakahatchee Strand State Park is adjacent to Everglades City’s water plant.

Funders
- Florida Department of Environmental Protection
  - In addition to being a regulator, DEP manages the Clean Water State Revolving Fund.
- Florida Department of Economic Opportunity
  - Current funding source for Community Development Block Grant - Disaster Relief funds and a potential source for additional funds.
- Florida State Legislature – The region’s state senator and state house representative have been ardent supporters of the project and have secured initial state funding for the project.
- United States Congress – The region’s U.S. representative is sponsoring a direct federal appropriations bill.
- United State Department of Agriculture Rural Development (USDA RD) – Lender for previous infrastructure projects.

Technical Assistance Providers:
- Southeast Rural Community Assistance Project (SERCAP) – Provides project assistance including regionalization facilitation.
- Florida Rural Water Association – Provides asset management assistance.

Local Interest Groups:
- Everglades City History Society
- Everglades City Chamber of Commerce

Allies, Champions, and Stakeholders
According to the U.S. Environmental Protection Agency (EPA), stakeholders can be categorized as general stakeholders, allies, or champions. They include any individuals or groups that are affected by the collaboration, whether that is financially, socially, or environmentally. Each plays an important role in the regional collaboration implementation process. They all work together, and some may belong to more than one group.

Allies are stakeholders that are supportive of the project and are willing to talk about its benefits. In this project, the Everglades City Chamber of Commerce, the Big Cypress National Preserve, and SERCAP would likely be allies. Not all stakeholders will be proponents of the project, but the allies can help demonstrate the benefits of the project to them. Having a variety of allies is helpful, since they can speak to the needs and concerns of different types of stakeholders.

A champion stakeholder drives and leads the collaboration. For this project, Everglades City is the champion and project coordinator; it has a vested interest in the success of the project. Having obtained the initial funding, the City has taken the lead and is pushing the new system forward. They have commissioned a master plan and organized the stakeholder meetings. Eventually, Everglades City will be the owner, operator and manager of the completed regional wastewater system.

Stakeholder Meeting Strategies
Everglades City has two goals for the stakeholder meetings:
1. To keep the stakeholders informed on the status of the project; and
2. To encourage its members to contribute to the project’s overall development.

The meetings use a collaborative process, which requires listening to the members’ perspectives in order to strengthen the overall project. Ultimately, the hope is for general stakeholders to become allies who can leverage their financial and managerial resources in service of the project. For example, if Collier County’s leaders understand the benefit of removing septic tanks for residences in Chokoloskee, Plantation Island, Carnestown, and Copeland, they may be motivated to apply for grants to help pay for the project.

Conclusion
Everglades City is taking a regional approach to solve the serious challenges created by a failing wastewater plant and failing septic systems nearby. By their nature, regional collaboration projects involve cooperation between many different types of stakeholders. For Everglades City’s regional wastewater system plant, these stakeholders include governments, funding agencies, natural parks, and more. These parties can work together in stakeholder meetings to form a strong coalition to provide financial and community support. With full funding, the City can address its wastewater system challenges, maintain a strong economy, and protect the natural environment.
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Tamina is a historic community located in Montgomery County, Texas. It is self-described as “urban development meets country living.” The African American community there was established shortly after the construction of the Houston and Great Northern railroads at the end of the Civil War. Today, Tamina remains a small, unincorporated area and is home to descendants of many of the original settlers. It is a resilient community full of history, with community members who have dedicated themselves to preserving their heritage while revitalizing their neighborhoods. The residents consider themselves survivors.

Around 200 people live in Tamina. All community members are people of color and nearly 70% are low income. The town is bordered by predominantly White, higher income, incorporated areas on all sides. The Cities of Shenandoah and Oak Ridge North border the western side of Tamina, the Woodlands Census Designated Place (CDP) is to the northwest, and the City of Conroe is to the north.

Tamina operates its own drinking water system, the Old Tamina Water Supply Corporation. It is a small system in the extraterritorial jurisdiction of the five incorporated areas—the City of Conroe, City of Shenandoah, the Woodlands CDP, Spring CDP, and Chateau Woods. The Old Tamina Water Supply Corporation president, James Leveston, is 72 years old and has lived in Tamina his entire life. “When we came here, there was no Woodlands, no Shenandoah, no Oak Ridge—nothing but Tamina,” he says. “As time went on, progress ate us up, and we are struggling to survive here now.”

Tamina Faces Wastewater Challenges
For the last 25 years, the residents of Tamina have been working to install a functional sewer system. Most homes and businesses operate on older septic tanks or more expensive anaerobic systems. Anaerobic systems purify a home’s wastewater through a tank and flush the water through a sprinkler system; the tanks must be pumped once a year. When many of the septic and anaerobic tanks failed, the Old Tamina Water Supply Corporation attempted to finance a public sewer system.
The corporation has faced several barriers to creating a sewer system for its community. Initially, the surrounding cities protested the sewer system construction, exercising their extraterritorial jurisdiction, which allows them to make certain decisions about the land outside of their city limits. The corporation was then promised funding for construction from the Montgomery County Community Development Block Grant (CDBG), but all that financing went to engineering firms for planning and environmental studies.

Next, Tamina tried partnering with Oak Ridge North and had a loan approved by the Texas Water Development Board (TWBD) to finish the project. Still, the two entities could not reach an agreement because the loan required Tamina to give up its water rights or a Certificate of Convenience and Necessity (CCN).

Communities Unlimited and Rural Development Step In
Challenged by the lack of construction funding, Old Tamina Water Supply Corporation searched and hoped for some guidance. After several nearby sewer systems backed out of regionalization proposals, the corporation’s board reached out to U.S. Department of Agriculture Rural Development (USDA RD). USDA RD then referred Tamina to Communities Unlimited (CU).

Initially, CU was not sure they could help, since the Median Household Income (MHI) of Tamina’s census tract exceeded $71,000, and some federal technical assistance funding is limited based on a community’s MHI. CU and USDA RD decided to go to Old Tamina Water Supply Corporation and take a tour of the boundaries to determine who specifically was served by the system, because they both believed that the true MHI could not possibly be $71,000. CU examined the census data and noted that the tract included the City of Shenandoah, a moderate- to upper-income city. CU then conducted an income survey to determine a more accurate MHI for Tamina itself. The result was an MHI of $18,200.

Once the income level was correctly documented, Old Tamina Water Supply Corporation’s board requested CU’s assistance to submit their sewer system application to USDA RD.

Harold Hunter, CU’s Texas State Director for Environmental Services, knew that it would be a complex project with many challenges, including getting the other incorporated areas to compromise and work together. Luckily, the engineer working with Old Tamina was also involved with another system that CU was working with. He said he would do all he could, even some pro bono activities, if CU would assist. Mr. Leveston, the board president, was determined to move forward, so the CU team jumped into action.

CU staff began by assessing the technical, managerial, and financial status of the water system. They determined that the Old Tamina Water Supply Corporation had sound financial and managerial systems in place. In addition, by the time the sewer was estimated to be completed, the water supply corporations’ debts would be paid in full, making additional billing for sewer services feasible and affordable. The billing system used for the water could also easily be converted to include sewer. CU then reviewed the most recent attempts at obtaining funding for the project and researched and established a plan for financing construction. All steps leading up to the application submission involved meetings with the corporation’s board and its engineer.

In 2012, USDA RD approved a plan that would pay for the extension of the City of Shenandoah’s sewer system to Tamina. The City of Shenandoah would also treat the wastewater. Shenandoah would have a Certificate of Convenience and Necessity (CCN), which would grant them the exclusive right to provide retail sewer service to Tamina customers. The award from USDA RD included a $1.19 million grant and $1 million in loans to pay for the construction. In addition, CU provided a $250,000 loan to assist Old Tamina Water Supply Corporation with paying for final plans and specifications, a topography map, and other necessary items. However, Shenandoah did not accept the agreement because the terms of the USDA loan would prohibit the city from annexing the area until the loan was paid off, which could take up to 40 years.

Communities Unlimited, Tamina, and Shenandoah Restart Collaboration
Now, nine years later, Shenandoah is once again willing to consider a regionalization solution. Unfortunately, there are new challenges. Tamina lost their sewer permit during this time and a key board member sold his home and moved to East Texas. In addition, Shenandoah’s engineer estimates that the cost of construction is more than $5 million now, instead of the $2.2 million it would have cost in 2012. James Leveston said that he feels that Tamina has been neglected.

Despite these challenges, CU spoke with the Mayor of Shenandoah, Rick Wheller, in June of 2021 and determined that the city can annex some parts of Tamina, decreasing the number of connections by approximately 41, but still make the Tamina sewer project financially feasible. In addition, Shenandoah has agreed to provide financing. The Old Tamina Water Supply Corporation Board of Directors requested CU’s assistance once again to help complete needed tasks throughout the construction process.

CU, Tamina, and Shenandoah continue to work together to develop a plan that will meet everyone’s needs. We hope that this most recent attempt at regional collaboration will be a success.

RURAL MATTERS 17
By now, your water system is likely familiar with America’s Water Infrastructure Act (AWIA) Section 2013, which requires Community Water Systems (CWSs) serving more than 3,300 people to develop or update a Risk and Resilience Assessment (RRA) and Emergency Response Plan (ERP) and certify completion of each to the United States Environmental Protection Agency (EPA). The graphic below shows the RRA and ERP deadlines, based on system population size, for the current AWIA certification cycle. All RRA deadlines have now passed. If your system, has not certified the RRA, please complete this requirement immediately. If you are a small-sized CWS (serve 3,301 – 49,999 people) that recently completed your RRA, the next step is to develop or update an ERP that incorporates findings of your RRA and certify completion of the ERP to EPA by December 31, 2021.

What is an ERP?
An ERP describes strategies, resources, plans, and procedures utilities can use to prepare for and respond to an incident, natural or man-made, that threatens life, property, or the environment. Incidents can range from small main breaks or localized flooding to large-scale hurricanes, earthquakes, or system contamination, among other examples. According to AWIA, ERPs must include these four components:

1. Resilience Strategies - Strategies and resources to improve resilience, including physical security and cybersecurity
2. Emergency Plans and Procedures - Plans and procedures for responding to a natural hazard or malevolent act that threatens safe drinking water
3. Mitigation Actions - Actions and equipment to lessen the impact of a malevolent act or natural hazard, including alternative water sources, relocating intakes and flood protection barriers
4. Detection Strategies - Strategies to detect malevolent acts or natural hazards that threaten the system

Preparing an AWIA-Compliant Emergency Response Plan
Those who tell the stories rule the world.
In addition, CWSs shall to the extent possible coordinate with local emergency planning committees (established under the Emergency Planning and Community Right-To-Know Act of 1986) when preparing or revising an ERP under AWIA.

ERP Guidance and Template

EPA has created an easy-to-use ERP Template and Instructions to assist water utilities with developing an ERP in accordance with AWIA. The ERP Template and Guidance is available to download here epa.gov/waterutilityresponse/develop-or-update-drinking-water-utility-emergency-response-plan. The ERP Template and Instructions is a PDF document that features an embedded blank ERP template in Word format that can be easily accessed and modified by utility personnel to meet their own water system needs. To access the embedded Word document, download the ERP template and open in a PDF reader. If you experience technical issues opening the template, ensure you are using a PDF reader and your settings are adjusted to allow embedded documents to open.

EPA does not require CWSs to use any designated standards, methods, or tools to conduct RRAs or ERPs. However, the ERP Template and Guidance is a tool provided as optional support during the process. If your CWS already has an ERP, you may use your existing ERP document as a starting point. Please review the document to make sure that the ERP covers all the criteria specified in AWIA and is up to date when it is certified to EPA.

EPA has hosted a series of free, virtual trainings on how to develop an AWIA ERP. For recordings of these trainings or information on upcoming ERP trainings, please visit epa.gov/waterresilience/awia-section-2013#TNG.

Certification Process

After the ERP has been completed, it needs to be certified to EPA. For information on how to certify, including a video and a PDF tutorial of how to use the electronic certification system, visit epa.gov/waterresilience/how-certificate-your-risk-and-resilience-assessment-or-emergency-response-plan. If you already created an account to electronically certify your RRA and are logging back in to certify your ERP, here is how to navigate the electronic system to certify your ERP:

1. Log in to encromerr.epa.gov with your User ID and Password.
2. From the home screen, click “Services”.
3. Locate the water system and click the drop-down arrow.
4. Click “Add New Role To Existing Organization”.
6. Click “Continue”.
7. Enter the PWSID and click “Continue”.
8. You will be returned to the home page. Locate the water system and click.

“Certify your Emergency Response Plan”. You will be taken to the Emergency Response Plan certificate to complete your submission.

5-Year Certification Cycle

After the initial AWIA certification deadlines, each CWS serving more than 3,300 people must review its RRA and ERP at least once every five years to determine if it should be revised. Upon completion of such a review, the CWS must certify to EPA that it has reviewed its RRA and ERP and revised them, if applicable. Future AWIA certification cycle deadlines will occur 5 years from the original deadlines written in the law. For example, for the next 5-year AWIA certification cycle, small-sized CWSs must recertify their RRA by June 30, 2026 and ERP by December 31, 2026. Note that while ERP certification to EPA is only required every 5 years, utilities are encouraged to continuously update their ERPs for new information, such as new emergency contacts or after significant incidents to build in any lessons learned during response.

For more information on the AWIA Section 2013 requirements, visit epa.gov/waterresilience/awia-section-2013.

Questions about the requirements can be sent to dwresilience@epa.gov.
Rural Community Assistance Partnership

A nonprofit network reaching rural and small communities in all fifty states to improve quality of life.